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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,051	11/16/2001	Atsujiro Ishii	P 283710 OL76398N-US-DCIP	7967

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EXAMINER
THOMPSON, TIMOTHY J

ART UNIT	PAPER NUMBER
2873	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/988,051	Applicant(s) ISHII ET AL.	
	Examiner Timothy J Thompson	Art Unit 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,42,43 and 45-69* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1,43,45-49, 50/1, 50/43, 51/1, 51/43, 52/1, 52/43, 53-61,63 and 66-69* is/are allowed.

6)☒ Claim(s) *42,51/42,52/42,62,64 and 65* is/are rejected.

7)☒ Claim(s) *50/42* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☒ Certified copies of the priority documents have been received in Application No. *09/172,263* .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> **(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.**

Claims 42, 51/42, 52/42, 62, 64, 65 rejected under 35 U.S.C. 103(a) as being unpatentable over Masumoto(U.S. Patent No. 4,634,236). In view of Uzawa(U.S. Patent No. 5,798,872).

Regarding claim 42, Masumoto discloses discloses a first lens group having positive refracting power(fig 25A, I); a second lens group that has negative refracting power and moves from an object side to an image plane side of said system during zooming from a wide-angle end to a telephoto end of said system(fig 25A, II); a third lens group having positive refracting power(fig 25A, III); a fourth lens group that has positive refracting power and is movable during zooming(fig 25A, IV), the first lens group has two lenses, a negative lens(fig 25A, r1-r2) and a positive lens(fig 25A, r2-r3), the third lens group has three lenses, a positive lens(fig 25A, r10-r11), a positive lens(fig 25A, r12-r13) and a negative lens(fig 25, r14-r15). Masumoto does not disclose the third lens group has at least one aspherical surface. However, Uzawa discloses the third lens group has at least one aspherical surface(col 5, lines 39-55) . It would have been obvious to one skilled in the art at the time of the invention to place an aspherical surface in the third

lens group as shown by Uzawa, in the zoom lens group of Masumoto, since as shown Uzawa aspherical surfaces are commonly placed in the third lens group of a zoom lems system so as to correct for aberrations.

Regarding claim 51/42, Masumoto discloses the third lens unit moves during zooming(fig 25A, fig 25B).

Regarding claim 52/42, Masumoto discloses the third lens unit moves towards the object side during zooming(fig 25A, fig 25B).

Regarding claim 62, Masumoto discloses a first lens group having positive refracting power(fig 25A, I); a second lens group that has negative refracting power and moves from an object side to an image plane side of said system during zooming from a wide-angle end to a telephoto end of said system(fig 25A, II); a third lens group having positive refracting power(fig 25A, III); a fourth lens group that has positive refracting power and is movable during zooming(fig 25A, IV), the first lens group has two lenses, a negative lens(fig 25A, r1-r2) and a positive lens(fig 25A, r2-r3), the third lens group has three lenses, a positive lens(fig 25A, r10-r11), a positive lens(fig 25A, r12-r13) and a bi-concave negative lens(fig 25, r14-r15), Masumoto does not disclose the third lens group has at least one aspherical surface. However, Uzawa discloses the third lens group has at least one aspherical surface(col 5, lines 39-55) . It would have been obvious to one skilled in the art at the time of the invention to place an aspherical surface in the third lens group as shown by Uzawa, in the zoom lens group of Masumoto, since as shown Uzawa aspherical surfaces are commonly placed in the third lens group of a zoom lens system so as to correct for aberrations.

Regarding claim 64, Masumoto discloses a first lens group having positive refracting power(fig 25A, I); a second lens group that has negative refracting power and moves from an object side to an image plane side of said system during zooming from a

wide-angle end to a telephoto end of said system(fig 25A, II); a third lens group having positive refracting power(fig 25A, III); a fourth lens group that has positive refracting power and is movable during zooming(fig 25A, IV), the first lens group has two lenses, a negative lens(fig 25A, r1-r2) and a positive lens(fig 25A, r2-r3), the third lens group has three lenses, a positive lens(fig 25A, r10-r11), a positive lens(fig 25A, r12-r13) and a negative lens(fig 25, r14-r15), F2/F3 = .68. Masumoto does not disclose the third lens group has at least one aspherical surface. However, Uzawa discloses the third lens group has at least one aspherical surface(col 5, lines 39-55) . It would have been obvious to one skilled in the art at the time of the invention to place an aspherical surface in the third lens group as shown by Uzawa, in the zoom lens group of Masumoto, since as shown Uzawa aspherical surfaces are commonly placed in the third lens group of a zoom lens system so as to correct for aberrations.

Regarding claim 65, Masumoto discloses a first lens group having positive refracting power(fig 25A, I); a second lens group that has negative refracting power and moves from an object side to an image plane side of said system during zooming from a wide-angle end to a telephoto end of said system(fig 25A, II); a third lens group having positive refracting power(fig 25A, III); a fourth lens group that has positive refracting power and is movable during zooming(fig 25A, IV), the first lens group has two lenses, a negative lens(fig 25A, r1-r2) and a positive lens(fig 25A, r2-r3), the second lens group has at least three lens components(fig 25A, r4-r9), the third lens group has three lenses, a positive lens(fig 25A, r10-r11), a positive lens(fig 25A, r12-r13), a negative lens(fig 25, r14-r15), F2/F3 = .68. Masumoto does not disclose the third lens group has at least one aspherical surface. However, Uzawa discloses the third lens group has at least one aspherical surface(col 5, lines 39-55) . It would have been obvious to one skilled in the art at the time of the invention to place an aspherical surface in the third lens group as

shown by Uzawa, in the zoom lens group of Masumoto, since as shown Uzawa aspherical surfaces are commonly placed in the third lens group of a zoom lens system so as to correct for aberrations.

Allowable Subject Matter

Claims 50/42 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. With the important feature being the first lens group is fixed during zooming.

Claims 1, 43, 45-49, 50/1, 50/43, 51/1, 51/43, 52/1, 52/43, 53-61, 63, 66-69 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art taken either singularity or in combination fails to anticipate or fairly suggest the limitations of the independent claim, in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in independent claims 1, 43, 45, 46, 47, 49, 53-61, 63, 66-69 with the important features being; the third lens group has a negative lens closet to the object side; the third lens group consists of, in order from an object side thereof, a double-convex positive lens, and a having a positive meniscus lens convex on an object side thereof; or a third lens group having, in order from an object side thereof, a double-convex

positive lens, and a doublet consisting of a positive meniscus lens convex on an object side thereof and a negative meniscus lens; or a positive third lens group having, in order form an object side thereof, a positive single lens convex on an object side thereof and a doublet positive lens convex on an object side thereof Therefore claims 1, 43, 45-49, 50/1, 50/43, 51/1, 51/43, 52/1, 52/43, 53-61, 63, 66-69 are allowed.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Thompson whose telephone number is (703) 305-0881. If the examiner can not be reached his supervisor, Georgia Epps, can be reached on (703) 308-4883.

T.J.T.

11/15/02

Georgia Epps
Supervisory Patent Examiner
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